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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/862,665	05/21/2001	Nicola Zatelli	854063.496C1	2168	
500	7590 05/22/2003				
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC			EXAMINER		
701 FIFTH A SUITE 6300	701 FIFTH AVE			FARAHANI, DANA	
	WA 98104-7092				
<i>52.</i> 11125,	,0101 /0,2		ART UNIT	PAPER NUMBER	
			2814		
			DATE MAILED: 05/22/2003	1	

Please find below and/or attached an Office communication concerning this application or proceeding.

·	Application No.	Applicant(s)	/				
Office Action Summary	09/862,665	ZATELLI ET AL.					
Office Action Summary	Examiner	Art Unit					
The MAILING DATE of this communication	Dana Farahani	2814					
Period for Reply	appears on the cover sin	eet with the correspondence address	•				
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, - If NO period for reply is specified above, the maximum statutory provided to reply within the set or extended period for reply will, by second patent term adjustment. See 37 CFR 1.704(b). Status	ON. R 1.136(a). In no event, however, n. a reply within the statutory minimu eriod will apply and will expire SIX statute, cause the application to be	may a reply be timely filed n of thirty (30) days will be considered timely. 6) MONTHS from the mailing date of this commun some ABANDONED (35 U.S.C. § 133).	nication.				
1) Responsive to communication(s) filed on	<u>2/24/03</u> .						
2a)⊠ This action is FINAL . 2b)□	This action is non-final						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims	·						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) <u>9-14</u> is/are allowed.							
6) Claim(s) 1, 3, 5, 6, 8, 15-17, and 20 is/are rejected.							
7) Claim(s) <u>2,4,7,18 and 19</u> is/are objected to.							
8) Claim(s) are subject to restriction a Application Papers	nd/or election requireme	nt.					
9) The specification is objected to by the Example 1	miner						
10) The drawing(s) filed on is/are: a) a		to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
 3. Copies of the certified copies of the application from the International * See the attached detailed Office action for a section for a sectio	al Bureau (PCT Rule 17.	2(a)).	je				
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign languag 15) Acknowledgment is made of a claim for do	e provisional application	has been received.					
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-94-3) Information Disclosure Statement(s) (PTO-1449) Paper N	8) 5) 🔲 No	erview Summary (PTO-413) Paper No(s) stice of Informal Patent Application (PTO-152 her:					

Art Unit: 2814

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 15-17, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogura et al., hereinafter Ogura (U.S. Patent 5,681,770).

Ogura discloses in figure 4G a structure comprising an oxide layer 115 located above a body of doped semiconductor material 103 and arranged in a position adjacent to a first gate region 112 of polycrystalline semiconductor material, the oxide layer having a first area; an oxide test region 117 of the same material as the oxide layer and having the same thickness and the same electrical characteristics as the oxide layer; filed oxide region 102 separating the oxide test region form the oxide layer (that is from the neighboring oxide layer; note that figure 4G represents one cell of the many cells which all have the test and the oxide region); and a polycrystalline region 112 of the same material as the gate region, having same thickness and the same electrical characteristics as the gate region, and positioned adjacent to the oxide test region, which has a second area greater than the first area (see column 8, lines 43-65).

Application/Control Number: 09/862,665 Page 3

Art Unit: 2814

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 3, 5, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogura.

Regarding claims 3, 5, and 8, there is a doped semiconductor material body 104; a gate region 112 of polycrystalline semiconductor material; an oxide layer, the right smaller half of layer 117, located above the semiconductor material body adjacent to the gate region and having a first area; a test region (the left gate (112) area) on the semiconductor material body, the test region including an oxide test region 117 of a same material as the oxide layer and having a thickness equal to the thickness of the oxide layer, having a second area that is greater than the first area; and poly-silicon 114 surrounds the test region.

Ogura does not disclose the oxide test region being very large.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the oxide test region very large in order to make a transistor device suitable for studying the characteristics of it in an educational laboratory. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1995).

Application/Control Number: 09/862,665

Art Unit: 2814

Regarding claims 6, the oxide and test regions each overly corresponding active

regions beneath them in the substrate.

Allowable Subject Matter

5. Claims 9-14 are allowed.

6. Claims 2, 4, 7, 18, and 19 are objected to as being dependent upon a rejected

base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject

matter:

The primary reason for the indication of allowability of the claims 2, 4, 7, 18 and

19 is the inclusion therein of the limitation that of the polycrystalline region has a closed

perimeter that completely surrounds a central opening in the polycrystalline region, and

it surrounds and delimits the oxide test region.

The primary reason for the indication of allowability of the claims 9-14 is the

inclusion therein of the limitation that of the dielectric test region is directly on the

semiconductor material body.

Response to Arguments

7. Applicants' arguments filed 2/24/03 have been fully considered but they are not

persuasive.

Page 4

Application/Control Number: 09/862,665

Art Unit: 2814

Applicants argue that the feature in claim 1, namely, the oxide layer and the test layer are of the same material and thickness, is not disclosed by Ogura and therefore, claim 1 is not anticipated by the reference. However, the examiner notes that the two layer have the same thickness, as can be seen in the figure, and it is stated in the reference, at column 8, lines 45 and 46, that layer 117 is preferably a combination of oxide and nitride. The layer would have been oxide, but the reference recommends using nitride along with oxide. This is because oxide is the most widely used insulator in IC chip design industry.

Regarding applicants' argument that the polycrystalline region 114 does not completely surrounds region 117, note that in figure 4G region 114 completely surrounds region 117 at least at one side of region 117 (the lower side).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Application/Control Number: 09/862,665

Art Unit: 2814

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Farahani whose telephone number is (703)305-1914. The examiner can normally be reached on M-F 8:00AM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (703)308-4918. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9318 for regular communications and (703)872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Dana Farahani May 18, 2003

Page 6

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